

## ABSTRACT

Parallel flow reaction systems comprising four or more reaction channels are disclosed. Distribution systems, and parallel flow reaction systems comprising such distribution systems are also disclosed. Specifically, the distribution systems comprise a feed-composition subsystem for providing a different feed composition to each of the four or more reactors. In preferred embodiments, the feed composition subsystem comprises at least one set of four or more feed-component flow restrictors, each of the four or more feed-component flow restrictors having a flow resistance that varies relative to other flow restrictors in the set.